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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/615,978	07/14/2000	Walter V. Klemp	P01880US1	6708

26271 7590 10/21/2002

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EXAMINER

STEPHENS, JACQUELINE F

ART UNIT PAPER NUMBER

3761

DATE MAILED: 10/21/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/615,978

Applicant(s)

KLEMP ET AL.

Examiner

Jacqueline F Stephens

Art Unit

3761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 July 2002 and 30 July 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19,21-24,28,30,31 and 33-39 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

- 5) ☐ Claim(s) _____ is/are allowed.

- 6) ☐ Claim(s) _____ is/are rejected.

- 7) ☒ Claim(s) 1-19,21-24,28,30,31 and 33-39 is/are objected to.

- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 30 July 2002 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 13.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

1. The Amendments filed 7/22/02 and 7/30/02, have been entered. Claims 20, 25, 26, 27, 29, and 32 have been canceled. Claim 39 has been added. Claims 1-19, 21-24, 30, 31, and 33-39 are pending in the instant application.

Response to Arguments

2. The objection to the drawings has been withdrawn.

Oath/Declaration

3. It is noted that the declaration does not identify the US application 60/144,345 filed July 16, 1999 on which priority is claimed. If applicant desires priority under 35 U.S.C. 120 based upon a previously filed copending application, specific reference to the earlier filed application should be made in the oath/declaration.

Specification

4. The disclosure is objected to because of the following informalities: page 14, line 15, "ration" should read "ratio". Appropriate correction is required.

Allowable Subject Matter

5. The indicated allowability of claim 38 is withdrawn in view of the newly discovered reference(s) to Stern et al. USPN 4681577. The indicated allowability of claim 32 is withdrawn in view of Suzuki USPN 6258196 B1. Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claim 23 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 23 is dependent on cancelled claim 20. The scope of the claim cannot be determined.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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10. Claims 1, 8-12, 14, and 16, are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki WO 9825999 A1 in view of Stern et al. USPN 4681577.

Regarding claims 1 and 8, Suzuki discloses an absorbent article as claimed (Figure 23) comprising an absorbent layer of hydratable fine fibers in the form of microfibril obtained from cellulose or a derivative thereof and super absorbent polymer particles bonded together by the hydratable fibers and a nonwoven substrate supporting the absorbent layer. The absorbent layer further comprises a coating (Abstract, Figures 23 and 52-54). Suzuki fails to disclose a coating of mineral oil over the SAP particles of the absorbent layer. Stern discloses an absorbent layer comprising superabsorbent particles and mineral oil (col. 13, lines 40-49). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate mineral oil in the absorbent layer of Suzuki. Doing so would provide an absorbent structure with high liquid retention and that entraps moisture and prevents leakage to surrounding clothing, which Stern teaches is desired.

Regarding claims 9-12, see Figures 11, 12, 14, and 15 of Suzuki.

Regarding claims 14 and 16, see Figure 10 of Suzuki.

11. Claims 2-6, 13, 15, 30, 31, 33, 34, 37-39, are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki WO 9825999 A1 in view of Stern et al. USPN 4681577 and further in view of Suzuki (USPN 6258196 B1).

Regarding claims 2-5, 21, 30, 38, and 39, Suzuki discloses an absorbent article as claimed (Figure 23) comprising an absorbent layer of hydratable fine fibers in the

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form of microfibril obtained from cellulose or a derivative thereof and super absorbent polymer particles bonded together by the hydratable fibers and a nonwoven substrate supporting the absorbent layer. The absorbent layer further comprises a coating (Abstract, Figures 23 and 52-54). Suzuki fails to disclose a coating of mineral oil over the SAP particles of the absorbent layer. Stern discloses an absorbent layer comprising superabsorbent particles and mineral oil (col. 13, lines 40-49). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate mineral oil in the absorbent layer of Suzuki. Doing so would provide an absorbent structure with high liquid retention and that entraps moisture and prevents leakage to surrounding clothing, which Stern teaches is desired.

Suzuki/Stern discloses the present invention substantially as claimed. However, Suzuki/Stern fails to disclose the absorbent article comprises cuffs containing absorbent material. Suzuki '196 an absorbent composite that may also be contained in side cuffs or side-wrapping elements (Figures 39, 40, and 41). It would have been obvious to one of ordinary skill in the art to incorporate the absorbent composite of Suzuki '999/Stern in side cuffs as disclosed in '196. Doing so would provide a means for absorbing fluids that are not readily absorbed by the core and prevent side leakage.

Regarding claims 31 and 37, see Figures 11, 12, 14, and 15 of Suzuki '999.

12. Regarding claims 6, 13, 33, and 34, Suzuki '999/Stern/Suzuki '196 disclose the present invention substantially as claimed. However, Suzuki '999/Stern/Suzuki '196 fails to disclose the super absorbent polymers exhibit gel blocking. Suzuki '999/Stern/Suzuki

'196 disclose the polymeric materials are adapted to swell such as in '196 Figure 16b. Suzuki '999/Stern/Suzuki '196 further disclose that the 'waves' are hydrophobic which inherently creates a water impervious area when the polymeric materials swell. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the composite with a low crosslinked material to create a liquid impervious material, since Suzuki '999/Stern/Suzuki '196 teaches creating a liquid barrier due to the swelling of the absorbent particles (col. 14, lines 15-25, col. 18, line 58 through col. 19, line 3). Additionally, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the absorbent composite in the backsheet as claimed, since the absorbent particles as modified above are capable of creating a liquid barrier.

13. Regarding claim 15, Suzuki '999/Stern discloses the present invention substantially as claimed. However, Suzuki '999/Stern fails to disclose the absorbent composite further includes a concentration of pulp material. Suzuki '196 discloses either the absorbent layer or the nonwoven substrate layer may comprise a concentration of pulp material (col. 3, lines 45-52). Therefore, the absorbent composite may contain pulp material disposed between layers as claimed (Figures 18 a/b, 22, and 30b). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate pulp in the absorbent layer as disclosed in Suzuki '196. Doing so would provide additional absorbent material, increase wicking properties, and help to prevent gel blocking in the absorbent layer.

14. Claims 7, 17, 35, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki '999/Stern/Suzuki '196 as applied to claims 6 and 30 above, and further in view of Gross (USPN 5403870). Suzuki '999/Stern/Suzuki '196 disclose the present invention substantially as claimed. However, Suzuki '999/Stern/Suzuki '196 fails to disclose the concentration and swell rate of the superabsorbent materials. Gross discloses a water-swellaable, water-insoluble polymeric material suitable for use in absorbent articles. Gross further discloses that the amount of cross-linking is proportional to its water-swellaability. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the composite of Suzuki '999/Stern/Suzuki '196 with a concentration of crosslinking agent suitable for the end product as taught by Gross. Additionally, discovering an optimum value of a result effective variable only involves routine skill in the art.

15. Claims 18, 19, 21, 22, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki (WO 9825999 A1) in view of Suzuki (USPN 6258196 B1).

Regarding claims 18 and 21, Suzuki discloses an absorbent article as claimed (Figure 23) comprising an absorbent layer of hydratable fine fibers in the form of microfibril obtained from cellulose or a derivative thereof and super absorbent polymer particles bonded together by the hydratable fibers and a nonwoven substrate supporting the absorbent layer. The absorbent layer further comprises a coating (Abstract, Figures 23 and 52-54). Suzuki fails to disclose the absorbent article comprises cuffs containing absorbent material. Suzuki '196 an absorbent composite that may also be contained in

side cuffs or side-wrapping elements (Figures 39, 40, and 41). It would have been obvious to one of ordinary skill in the art to incorporate the absorbent composite of Suzuki '999 in side cuffs as disclosed in '196. Doing so would provide a means for absorbing fluids that are not readily absorbed by the core and prevent side leakage.

Regarding claim 19, see Figure 10 of Suzuki.

Regarding claim 22, Suzuki '999/Suzuki '196 disclose the present invention substantially as claimed. However, Suzuki '999/Suzuki '196 fails to disclose the super absorbent polymers exhibit gel blocking. Suzuki '999/Suzuki '196 disclose the polymeric materials are adapted to swell such as in '196 Figure 16b. Suzuki '999/Suzuki '196 further disclose that the 'waves' are hydrophobic which inherently creates a water impervious area when the polymeric materials swell. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the composite with a low crosslinked material to create a liquid impervious material, since Suzuki '999/Suzuki '196 teaches creating a liquid barrier due to the swelling of the absorbent particles (col. 14, lines 15-25; col. 18, line 58 through col. 19, line 3). Additionally, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the absorbent composite in the backsheet as claimed, since the absorbent particles as modified above are capable of creating a liquid barrier.

Regarding claim 28 Suzuki '999 discloses the present invention substantially as claimed. However, Suzuki fails to disclose the absorbent composite further includes a concentration of pulp material. Suzuki '196 discloses either the absorbent layer or the nonwoven substrate layer may comprise a concentration of pulp material (col. 3, lines

45-52). Therefore, the absorbent composite may contain pulp material disposed between layers as claimed (Figures 18 a/b, 22, and 30b). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate pulp in the absorbent layer as disclosed in Suzuki '196. Doing so would provide additional absorbent material, increase wicking properties, and help to prevent gel blocking in the absorbent layer.

16. Claim and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki '999 in view of Suzuki '196 as applied to claim 18 above, and further in view of Gross (USPN 5403870). Suzuki '999/Suzuki '196 disclose the present invention substantially as claimed. However, Suzuki fails to disclose the concentration and swell rate of the superabsorbent materials. Gross discloses a water-swellaable, water-insoluble polymeric material suitable for use in absorbent articles. Gross further discloses that the amount of cross-linking is proportional to its water-swellaability. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the composite of Suzuki with a concentration of crosslinking agent suitable for the end product as taught by Gross. Additionally, discovering an optimum value of a result effective variable only involves routine skill in the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacqueline F Stephens whose telephone number is (703) 308-8320. The examiner can normally be reached on Monday-Friday 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on (703)308-1957. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3590 for regular communications and (703) 306-4520 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0858.

Jacqueline F Stephens
Examiner
Art Unit 3761



DENNIS RUHL
PRIMARY EXAMINER

October 17, 2002